



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,207	11/02/2001	Alan G. Turek	DP-305875	9130

7590 03/07/2005

VINCENT A. CICHOSZ, ESQ.  
DELPHI TECHNOLOGIES, INC.  
P.O. Box 5052  
Mail Code: 480-414-420  
Troy, MI 48007-5052

EXAMINER
----------

TRAN, HIEN THI

ART UNIT	PAPER NUMBER
----------	--------------

1764

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/000,207

Applicant(s)

TUREK, ALAN G.

Examiner

Hien Tran

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 10-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/20/01; 1/15/04; 5/17/04, 9/20/04  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of group II, claims 10-20 in the reply filed on 12/13/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). (Note that the claims 15-20, which were inadvertently left out in the previous office action, will be examined together with claims 10-14).
2. Claims 1-9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 12/13/04.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "20" (Fig. 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 1764

4. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the drawings to comply with CFR 1.84(p)(5), e.g. they should include the reference sign(s) mentioned in the specification and vice versa.

***Specification***

5. The disclosure is objected to because of the following informalities:

On page 12, line 7 "30formed" should be changed to --30 formed--.

Appropriate correction is required.

6. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Objections***

7. Claim 20 is objected to because of the following informalities: In claim 20, lines 1-2 one of the two phrases of "further comprising" should be deleted.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 10-11, 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanocki et al (WO 97/48890).

Art Unit: 1764

With respect to claims 10, 15, Sanocki et al discloses an exhaust emission control device and a method of manufacturing said device, comprising:

a substrate 18;

a housing 12 having an inlet end 14 and an outlet end 16;

a retention material 22 supporting said substrate 18 in said housing 12 between said inlet end and said outlet end;

a pair of outer shells 26, one of said outer shells being disposed on said inlet end 14, and a second one of said outer shells being disposed on said outlet end 16; and

a pair of insulators 40 comprised of insulation material and binder, said insulators 40 having a first surface disposed adjacent to an inner surface of said outer shell, each of said insulators being connected at least at an outboard end to said outer shells 26, and each of said insulators 40 being supported at an inboard end by said substrate 18 and said retention material 22 (page 4, lines 21 to page 6, line 21).

With respect to claim 11, Sanocki et al discloses that the substrate is a catalytic converting substrate, diesel particulate trapping substrate, etc. (page 7, lines 16-25).

Instant claims 10-11, 15-16 structurally read on the apparatus and method of Sanocki et al.

10. Claims 10-12, 15-16, 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Shirk et al (WO 98/50688).

With respect to claims 10, 15, 16, Shirk et al discloses an exhaust emission control device and a method of manufacturing said device, comprising:

a substrate 18;

Art Unit: 1764

a housing 12 having an inlet end 14 and an outlet end 16;

a retention material 22 supporting said substrate 18 in said housing 12 between said inlet end and said outlet end;

a pair of outer shells 26, one of said outer shells being disposed on said inlet end 14, and a second one of said outer shells being disposed on said outlet end 16; and

a pair of insulators 30, 40, 60, etc. comprised of insulation material and binder, said insulators having a first surface disposed adjacent to an inner surface of said outer shell 26, each of said insulators being connected at least at an outboard end to said outer shells 26, and each of said insulators being supported at an inboard end by said substrate 18 and said retention material 22 (see for example, Fig. 1, page 7, lines 13-31).

With respect to claim 11, Shirk discloses that the substrate is a catalytic converting substrate (page 5, lines 1-3).

With respect to claims 12, 19, Shirk et al discloses that the insulator each further comprises a core 28 connecting the outboard end to said outer shell 26.

Instant claims 10-12, 15-16, 19 structurally read on the apparatus and method of Shirk et al.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1764

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. The art area applicable to the instant invention is that of exhaust emission control device.

One of ordinary skill in this art is considered to have at least a B.S. degree, with additional education in the field and at least 5 years practical experience working in the art; is aware of the state of the art as shown by the references of record, to include those cited by applicants and the examiner (*ESSO Research & Engineering V Kahn & Co*, 183 USPQ 582 1974) and who is presumed to know something about the art apart from what references alone teach (*In re Bode*, 193 USPQ 12, (16) CCPA 1977); and who is motivated by economics to depart from the prior art to reduce costs consistent with the desired product characteristics. *In re Clinton* 188 USPQ 365, 367 (CCPA 1976) and *In re Thompson* 192 USPQ 275, 277 (CCPA 1976).

14. Claims 13-14, 17-18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirk et al (WO 98/50688) or Sanocki et al (WO 97/48890) in view of EP 413,998.

The apparatus and method of Shirk et al or Sanocki et al are substantially the same as that of the instant claims, but fail to disclose whether the insulator may comprise a mesh forming a second surface of the insulator and whether the housing may include integral outer shell at said inlet and outlet end.

However, EP 413,998 discloses the conventionality of providing a housing 1 including integral outer shell 5, 6 at the inlet and outlet ends and the insulator having a screen or mesh forming a second surface thereof.

It would have been obvious to one having ordinary skill in the art to alternately form an integral outer shell as taught by EP 413,998 in the method of Shirk et al or Sanocki et al on the basis of its suitability for the intended use as a matter of obvious design choice, as use of such is conventional in the art and no cause for patentability here and since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

It would have been obvious to one having ordinary skill in the art to provide a mesh/screen forming a second surface of the insulator in the apparatus and method of Shirk et al or Sanocki et al so as to retain the insulator in position thereof as taught by EP 413,998.

15. Claims 12, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanocki et al (WO 97/48890) in view of EP 413,998 or Shirk et al (WO 98/50688).

The apparatus and method of Sanocki et al are substantially the same as that of the instant claims, but fail to disclose provision of a core.

However, EP 413,998 discloses the conventionality of providing an insulator having a core 7 for connecting the outboard end to the outer shell 5.

Similar, Shirk et al discloses that the insulator each further comprises a core 28 connecting the outboard end to said outer shell 26.

It would have been obvious to one having ordinary skill in the art to provide a core in the apparatus and method of Sanocki et al for retaining the insulator in position thereof as taught by EP 413,998 or Shirk et al.

***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (571) 272-1454. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT  
March 3, 2005

*Hien Tran*  
**Hien Tran**  
**Primary Examiner**  
**Art Unit 1764**